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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/005,333	12/07/2001	Matthew D. Brown	08887818US	9469
7590 12/02/2004				
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CANADA				
		EXAMINER		
		LE, TRAN Q		
		ART UNIT		PAPER NUMBER
		2633		
DATE MAILED: 12/02/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/005,333	Applicant(s) BROWN ET AL.	
	Examiner Tran Q. Le	Art Unit 2633	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 07 December 2001.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5-7, 9-12 and 14 is/are rejected.
- 7) ☒ Claim(s) 4, 8 and 13 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 December 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some    c) ☒ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>11/26/04</u> | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-3, 5-7, 9-12, and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Walsh (US Patent No: 5,825,516).

Regarding claims 1, 2, 6, 10 and 11, Walsh discloses an optical power meter for detecting loss factors that functions as an apparatus of detecting bit disparity within a data stream (74, fig. 4) comprising: (i) a low pass filter (96, 98, fig. 5 and col. 6, lines 51-53) for determining an average power value for a data stream (88, fig. 4 and col. 6, lines 39-67 and col. 7, lines 1-17) and for determining a one bit stream baseline power value and a zero bit stream baseline power value from a test signal (col. 7, lines 17-23 and lines 44-48, i.e. since the baseline power value determined by the system corresponds to a unperturbed state of the fiber optic link, it can be interpreted the same as coming from the test signal); and a measuring element (14, fig. 4 col. 7, lines 44-46) and for ascertaining the median value of the one bit stream baseline power value and the zero bit stream baseline power value so as to determine a bit stream baseline power value of the test signal and for measuring the deviation of the average

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power value from the baseline power value (col. 7, lines 17-23, lines 44-48, lines 65-67 and col. 8, lines 1-13).

Walsh differs from claims 1, 2, 6, 10, and 11 in that Walsh does not disclose the deviation of the average power value from the baseline power value determines the bit disparity value. However, Walsh teaches that if the deviation of the power level falls outside the bounds, the system will set an alarm condition to notify the user of the signal loss or notify the user that the fiber optic link has been perturbed in some manner (col. 7, lines 65-67 and col. 8, lines 1-13), which is inherently the root cause of the bit disparity. It would have been obvious to obtain the deviation of the average power value from the baseline power value in order to determine the bit disparity value.

Regarding claims 3, 7, 12 Walsh further discloses that a threshold alarm is set to trigger upon detection of a high measurement of the bit disparity value whereby an automated customer warning may be transmitted upon the triggering of the threshold alarm (col. 7, lines 65-67 and col. 8, lines 1-13).

Regarding claims 5, 9, and 14, Walsh further discloses a means of converting the bit disparity value into a digital representation (col. 4, lines 20-42).

***Allowable Subject Matter***

3. Claims 4, 8, 13 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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4. The following is an examiner's statement of reasons for allowance:

As to claims 4, 8, and 13, the prior art of record fails to teach the specific step/means of adjusting the control of a laser upon detection of a high measurement of the bit disparity value as cited in those claims.

### ***Conclusion***

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Shoji et al. (US Patent No: 6,349,081) is cited to show a recording apparatus comprising of a low pass filter (113, fig. 1), a signal generator (127, fig. 1), a data comparator (131, fig. 1) that compares the read data signal and the signal from the generator to select the power level used to drive the laser (fig. 1).

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tran Q. Le whose telephone number is (571)272-2046. The examiner can normally be reached on 8am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Chan can be reached on (571)272-3022. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TQL

*Harlyhan*  
*Hanh Phan*  
*Primary Examiner*  
*11/26/04.*